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Basin Electric
Power Cooperative
Montana long
range plan
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BASIN ELECTRIC
POWER COOPERATIVE

MONTANA LONG RANGE PLAN

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BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA 58501
PHONE 701/223-0441 - TWX 910/677-2342

MONTANA
HELENA, MONTANA 59620
AUG 20 1983

April 1, 1983

Mr. Leo Berry, Jr., Director
Department of Natural
Resources & Conservation
32 South Ewing
Helena, MT 59601

Dear Mr. Berry:

Pursuant to the provisions of the Major Facility Siting Act and regulations adopted thereunder, Basin Electric Power Cooperative hereby submits its 1983 Long Range Plan.

As noted in the Plan, the Circle, MT, area is one of three preferred locations for a west-side coal-fired generating plant. The other two locations are in Wyoming.

No particular location has been chosen; however, should the Circle, MT, area be identified as the optimum site, Basin Electric looks forward to cooperating with the Department through the siting process.

Enclosed are an original and twelve (12) copies of the plan.

Sincerely,

James L. Grahl

JLG/wrg

Enclosures

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INTRODUCTION

Basin Electric Power Cooperative, headquartered in Bismarck, ND, is a regional rural electric wholesale power supplier. Basin Electric's service area includes all or portions of eight states: Montana, Wyoming, Colorado, North Dakota, South Dakota, Nebraska, Minnesota and Iowa.

Central Montana Electric G&T Cooperative, Billings, MT, and Upper Missouri G&T Electric Cooperative, Sidney, MT, are two Class A members of Basin Electric. These cooperatives provide electric service for eighteen Montana rural electric distribution cooperatives.

Basin Electric completed a preliminary siting study identifying potential alternative sites for mine-mouth or short-haul, two-unit generating plants utilizing Wyoming, Montana, or North Dakota coals. The architect/ engineering firm of Burns & McDonnell, Inc., Kansas City, MO, conducted the siting study.

The potential sites were evaluated in terms of ultimate generating capacity, fuel cost and quality, cooling and water make-up requirements, socio-economic impacts, power transmission costs, environmental impacts, and other cost and environmental factors.

Because Basin Electric's wholesale power supply obligation includes portions of two major asynchronous electrical systems in the United States, the Cooperative must plan separately for its east-side and west-side wholesale power-supply obligations.

The siting study, therefore, involved a search for two general siting areas, with the west-side study including locations in eastern Montana.

The west-side site would have an ultimate capability of up to 1000 MW and would serve Central Montana G&T and Upper Missouri G&T west-side loads, plus some additional west-side loads of Rushmore Electric Power Cooperative in Wyoming and South Dakota.

Basin Electric is investigating a potential coal and water supply for those areas which appear most favorable. As of April 1, 1983, no one west-side site has been identified as the optimum location. Therefore Basin Electric's response to certain informational requirements in the Montana long-range plan must be regarded as one of the three possibilities presently identified as preferred siting areas.

Basin Electric's preferred areas under study for the construction of up to 1000 (net) MW of generation include the Circle area of Montana, and the Gillette and Arvada/Sheridan county areas of Wyoming.

I

Filing Date For New Applications

Tentative application schedule:

(a) 1983 thru fourth quarter - No application

(b) 1985 first half - Application for a steam-electric power plant and transmission facilities

(c) 1986-1992 - No applications

II

Description of Tentative Applications

The facility contemplated by the application is a lignite or coal-fueled steam-electric generating plant with attendant transmission lines. The plant would be sized to produce up to 1000 (net) MW of electric power from two generating units of up to 500 (net) MW each.

Basin Electric is presently studying possible methods of meeting its members' future power requirements. The preliminary base-load planning and siting study considers various on-line dates for a base load unit on the west side.

We envision the facility would be located in one of three (3) areas being considered in Montana and Wyoming.

The one Montana siting area is near Circle, MT.

Application for a steam electric power plant would include:

(a) The development of a cooling water supply intake, piping and treatment facilities.

(b) The development of a mine to supply approximately 3-6 million tons of fuel per year (depending on the quality of the coal).

(c) The construction of railroad spurs and access roads as required.

(d) The construction of transmission line(s) with terminals to deliver the output of the units to the appropriate points of connection within the regional transmission grid.

(e) The development of housing and related service facilities agreements as required to accommodate construction workers and their families.

(f) The development of housing arrangements as required for permanent employees.

Construction would tentatively commence as early as 1989 and be completed in 1993. These dates may be delayed depending upon the results of further studies conducted by Basin Electric.

III

Transmission Lines and Associated Facilities Construction Dates

The generating plant would probably tie in to the existing transmission grid in Montana and Wyoming in order to deliver the power to Basin Electric members.

A tentative date of 1989 is given for commencement of transmission lines and associated substation facility construction with completion in 1993 or when the plant comes on line.

IV

Monthly Average Demand

Basin Electric's 1982 historic demand and energy deliveries to member loads located in Montana are shown in Exhibit A. These loads consist of our deliveries to Central Montana Electric G&T Cooperative and Upper Missouri G&T Electric Cooperative's Montana load.

Basin Electric 1982 Historic Power Supply

Responsibility to Members' Montana Load

1982 Demand		1982 Energy	
Jan KW	41,168	Jan MWH	24,154
Feb KW	43,299	Feb MWH	25,229
Mar KW	37,992	Mar MWH	20,825
Apr KW	35,325	Apr MWH	20,661
May KW	31,397	May MWH	17,160
Jun KW	29,287	Jun MWH	17,667
Jul KW	29,587	Jul MWH	16,769
Aug KW	31,014	Aug MWH	18,045
Sep KW	31,503	Sep MWH	18,308
Oct KW	32,234	Oct MWH	18,431
Nov KW	36,999	Nov MWH	20,697
Dec KW	40,696	Dec MWH	23,025
KW Month	420,501	Total MWH	240,971

V

Energy Demand Projections

Exhibits B, C and D, on the following pages, illustrate Basin Electric's projected future power supply responsibility to member loads located within Montana. Exhibit B represents the winter-season peak-demand obligation; Exhibit C represents the summer-season peak-demand obligation; and Exhibit D represents the annual energy obligation. These projections are based on 10-year load forecasts prepared by Central Montana and Upper Missouri.

Basin Electric Projected Power Responsibility

To Members' Montana Load

WINTER (KW)

	Upper Missouri	Central Montana	Total
1983	50,816	3,800	54,616
1984	60,176	8,300	68,476
1985	72,396	12,600	85,496
1986	79,207	17,400	96,607
1987	84,469	22,300	106,769
1988	89,755	28,600	118,355
1989	95,092	33,000	128,092
1990	100,377	38,600	138,977
1991	105,837	44,500	150,337
1992	111,561	50,500	162,061

Basin Electric Projected Power Responsibility

To Members' Montana Load

SUMMER (KW)

	Upper Missouri	Central Montana	Total
1983	37,916	6,800	44,716
1984	45,119	12,100	57,219
1985	54,402	17,400	71,802
1986	59,388	23,200	82,588
1987	63,745	29,300	93,045
1988	68,077	35,800	103,877
1989	72,467	42,800	115,267
1990	76,843	50,200	127,043
1991	81,361	58,200	139,561
1992	86,066	66,600	152,666

Basin Electric Projected Power Supply
Responsibility To Members' Montana Load

ANNUAL ENERGY (MWH)

	Upper Missouri	Central Montana	Total
1983	273,588	19,900	293,488
1984	323,417	42,300	365,717
1985	391,212	65,300	456,512
1986	416,667	89,300	505,967
1987	437,664	114,800	552,464
1988	467,530	142,500	610,030
1989	488,411	168,100	656,511
1990	506,353	197,700	704,053
1991	535,928	226,700	762,628
1992	568,484	257,700	826,184

VI

Price and Rate Structures Effect on Demands

Basin Electric at this time is unable to provide an assessment of what effect changes in price and rate-structures would have upon demand.

VII

Pooling, Interconnection, and Exchange Agreements

Basin Electric Power Cooperative supports and encourages a coordinated regional plan to meet energy needs.

Following are examples of the Cooperative's involvement in regional coordination:

Missouri Basin Systems Group (MBSG)

In 1963, Basin Electric, along with over 100 other rural electric cooperatives and municipal electric systems in the Missouri River Basin, and the U.S. Bureau of Reclamation (USBR), formed the Missouri Basin Systems Group (MBSG) and established a Joint Transmission System (JTS). Through a contract called "the Pooling Agreement," MBSG members agreed to plan, pool and coordinate the use of power supply facilities required by individual members of the group. Membership in the MBSG is open to all USBR "preference customers." Non-members are continually informed of MBSG activities and encouraged to join the association so that all consumer-owned systems in the Missouri River Basin might have a direct voice in regional planning and pooling.

The Joint Transmission System today consists of approximately 8,360 miles of regional transmission lines. Operated by the Department of Energy's Western Area Power Administration (WAPA), this transmission system is jointly utilized by the consumer-owned systems and serves as the "backbone" of the regional power grid.

Under arrangements of a 35-year contract, Basin Electric pays the Federal government for leasing capacity in the JTS. These arrangements strengthen the region's electrical delivery system, minimize duplication of transmission facilities and result in savings to the Federal government and consumers.

Included in the JTS are Basin Electric's two 345 kilovolt (KV) transmission lines from the Leland Olds Station in North Dakota to the WAPA terminal substation at Watertown and Ft. Thompson, SD. Also included are the Leland Olds to Logan, ND 230 KV line, a Logan to Montana Dakota Utilities Company's Kenmare 115 KV substation and several 230/115 KV substations interconnecting the JTS.

Upon beginning commercial operation, the Cooperative's 345/500 KV line from the Antelope Valley Station to Huron, SD, and the Antelope Valley Station to Leland Olds 345 KV line, will also become part of the JTS.

Systems interested in joint planning indicate to MBSG their needs for future power and energy. These requirements are considered as part of the regional system as if they were the requirements of a single integrated utility system. Studies are conducted to indicate needs of the group. All factors, including the cost of capacity, fuel, water, pollution control facilities, financing and transmission to deliver the output where it is required are considered.

One of the primary activities of the MBSG is the Missouri Basin Power Project (MBPP), a program to meet the energy requirements of a number of MBSG members through the 1980s. Basin Electric will receive 44.34 percent or 732 megawatts of MBPP capacity.

The MBPP includes Laramie River Station, three 550 (net) MW generating units located in southeastern Wyoming. Unit 1 was declared commercial July 1, 1980; Unit 2 July 1, 1981, and Unit 3 November 1, 1982.

MAPP

Basin Electric Power Cooperative participates on various committees which review the transmission adequacy and plans of area utilities as a function of the Mid-Continent Area Power Pool (MAPP).

Interconnection and Common Use Agreement

Member cooperatives of Basin Electric have a common service area with Montana Dakota Utilities in the western half of North Dakota and a portion of Montana and South Dakota. In order to avoid the duplication of transmission facilities, an agreement was entered into on January 1, 1972, and provides for joint use and construction of transmission facilities. This agreement provides for studies to be performed every two years to determine what additional transmission will be required to meet area load growth. The agreement calls for the sharing of facilities on the basis of each utility's respective project loads.

The following facilities are a part of coordinated planning with Montana Dakota Utilities Company:

a) Leland Olds-Mallard 230 KV Line
b) Logan (ND)-Tioga (ND) 230 KV Line
c) Logan - Kenmare 115 KV Line
d) Bowdle - Ipswich 41.6 KV Line
e) Wishek (ND) Junction 230/115 KV Substation
f) Northwest Mandan (ND)-New Salem (ND) 115 KV Line
g) Medora (ND) 230/41.6 KV, 230/57 KV Substation
h) Herbert Weber (ND) 230/41.6 KV Substation
i) New England (ND)-Mott (ND)-Elgin (ND) 115 KV Line
j) Bowman (ND) 230/41.6 KV, 230/57 KV Substation
k) Hettinger (ND) 230/115 KV Substation
l) Culbertson (MT) 115/57 KV Substation

In addition, as part of an agreement reached between Basin Electric and Saskatchewan Power Corporation (SPC) allowing for the seasonal exchange of up to 100 MW of electricity starting in the early 1980s, a 230 KV transmission line was built from Tioga, ND to Saskatchewan, Canada. This line was routed so that it can be tapped for future use by MDU and member systems of Basin Electric. The Tioga 230/115 KV Substation is currently under construction and is planned for operation in December 1983.

In addition to the above-mentioned groups Basin Electric currently is involved in pooling, interconnection and exchange agreements with the following:

a) Inland Power Pool - located west of the east-west ties.

b) Black Hills Power Company. (pages 16-21)

c) Nebraska Public Power District. (pages 22-24)

d) United Power Association. (pages 25-27)

e) Western Area Power Administration. (pages 28-29)

f) Saskatchewan Power Corporation. (pages 30-31)

Contracts for MBSG, MAPP, the Interconnection and Common Use Agreement with MDU, and the Inland Power Pool are contained in an exhibit book on file in the Energy Division of the Montana Department of Natural Resources and Conservation. Information on items "b" through "f" follows.

Contract for Electric Transmission Service between Black Hills Power and Light Company, Rushmore Electric Power Cooperative and Basin Electric Power Cooperative dated March 12, 1975

A) Nature of Obligation and Benefits:

This agreement provides for the construction of additional electric facilities needed by the parties to fulfill their respective utility responsibilities, to furnish transmission service for Rushmore for the term of the contract, and to provide for compensation to Black Hills.

This contract defines the contract path after the integration of delivery of electric power and energy by Black Hills for Rushmore to be from Stegall, Nebraska, to points of delivery of Black Hills' system to Rushmore South Dakota and Rushmore Wyoming. The integration of Black Hills' system into the interconnected western system allows alternative displacement paths of delivery in fulfillment of the defined contract path.

B) List of all Parties to the Agreement:

The agreement was executed between Black Hills Power and Light Company, Rushmore Electric Power Cooperative and Basin Electric Power Cooperative.

C) Time Period:

Within the meaning of this contract, the interim term is the period of time commencing at the time the Wyodak temporary sub-station is in operation and ending January 1, 1977. The term of this contract commenced May 19, 1975 and shall terminate 12:01 AM, May 1, 2007.

D) Amount of Electrical Energy:

The total delivery of power by Black Hills to Rushmore shall never exceed 160,000 kilowatts of capacity without the mutual agreement of the parties regardless of the source of that power.

E) Specified Timing or Rate of Delivery or Receipt of Energy:

Energy adjustment during ultimate term: All load-pattern energy, regardless of its source, to be delivered to Black Hills for delivery to Rushmore during the ultimate term, shall be adjusted for transmission and transformation losses under the following formula:

(1) Delivery at Wyodak with metering at 230,000 volts:

(a) During the period of time the Wyodak plant is in operation, the energy to be delivered to Black Hills shall equal the metered kilowatt hours times 1.02.

(b) During the time the Wyodak plant is not in operation, the energy to be delivered to Black Hills shall equal the metered kilowatt hours times 1.05.

(2) Delivery at Wyodak with metering at 69,000 volts:

(a) With the Wyodak plant in operation, the energy to be delivered to Black Hills shall equal (metered kilowatt hours times 1.01) times 1.02.

(b) With the Wyodak plant not in operation, the energy to be delivered to Black Hills shall equal (metered kilowatt hours times 1.01) times 1.05.

(3) For the purpose of the adjustment to be made in subparagraphs (1) and (2) in this section, the energy deemed to be delivered while the Wyodak plant is in operation shall be the same percentage of total kilowatt hours metered during a billing month as the percentage calculated by dividing the hours in the billing month during which the plant is in operation by the total hours in the billing month. The energy deemed to be delivered while the Wyodak plant is not in operation shall be the percentage of total kilowatt hours metered during a billing month as calculated by dividing the hours in the billing month during which the plant was not in operation by the total hours in the billing month.

(4) Where delivery of electric power and energy is delivered and metered at 230,000 volts at a location other than at Wyodak, the electric energy to be delivered to Black Hills shall equal the metered kilowatt hours times 1.05.

(5) Where electric power and energy is delivered at a location other than at Wyodak at 230,000 volts with metering at 69,000 volts, the electric energy to be delivered to Black Hills shall equal (the metered kilowatt hours times 1.01) times 1.05.

(6) Where the delivery of electric power and energy is at a place other than at Wyodak at 69,000 volts with metering at 69,000 volts, the electric energy to be delivered to Black Hills shall equal (the metered kilowatt hours times 1.01) times 1.07.

(7) Where electric power and energy is delivered by Black Hills at places other than Wyodak and at 69,000 volts, but with metering at a lower voltage, the electric energy to be delivered to Black Hills shall equal (metered kilowatt hours times 1.02) times 1.07.

F) Financial Agreements:

Compensation for transmission service for Rushmore's South Dakota members during interim term: Commencing with the date of this contract and continuing through the interim term of this contract, Rushmore shall pay Black Hills one mill per kilowatt hour adjusted for losses delivered to Rushmore South Dakota as set forth in present contracts between Rushmore and Black Hills.

Compensation for transmission service to Rushmore Wyoming during interim term: No compensation shall be paid by Rushmore to Black Hills for delivery of electric power and energy to Rushmore Wyoming during the interim term of this contract.

Compensation to be paid by Basin Electric to Black Hills during ultimate term for transmission service to Rushmore South Dakota: During the ultimate term of this contract, Basin Electric shall pay to Black Hills one mill per kilowatt hour for all load-pattern energy (regardless of source) delivered pursuant to this contract to Rushmore South Dakota (subject to loss adjustments herein provided) less the amount paid to Black Hills by the Bureau for the Bureau energy sold to Rushmore South Dakota and contractually delivered through Black Hills' system to Rushmore South Dakota.

Compensation to be paid by Basin Electric to Black Hills during ultimate term for Rushmore Wyoming transmission service: During the ultimate term of this contract, Basin Electric shall pay to Black Hills one mill per kilowatt hour for all load-pattern energy associated with all of Rushmore Wyoming's load up to its first 150,000 kilowatts of demand (regardless of the energy's source, place of delivery, or who makes delivery); provided however, no compensation shall be paid Black Hills for energy delivered by the Bureau to Black Hills prior to January 1, 1986, for delivery to Rushmore Wyoming associated with a maximum demand of 4600 kilowatts. Compensation shall be adjusted for losses.

Compensation -- Minimum payment: If the total amount to be paid by Basin Electric to Black Hills during any calendar year of the ultimate term of this contract is less than $500,000, Basin Electric shall pay Black Hills an additional amount for that calendar year so that Black Hills has received a minimum payment of $500,000 annually during the ultimate term.

Compensation -- Time of payment: Basin Electric shall pay Black Hills monthly within fifteen days of billing for actual energy metered during the billing month less the wheeling charge billed by Black Hills to the Bureau for Bureau power delivered by Black Hills to Rushmore for the same month. On each billing during April and October during the ultimate term, Basin Electric shall pay Black Hills an additional amount, if necessary, so that Black Hills has received the minimum amount up to the date of billing.

Adjustments for transmission and transformation losses: The adjustments for transmission and transformation losses in determining the amount of compensation to be paid by Basin Electric to Black Hills shall be as follows:

(1) With delivery at Wyodak or at Sundance at 230,000 volts, the compensation shall equal metered kilowatt hours times one mill.

(2) With delivery at any location where the power and energy is metered at 69,000 volts, the compensation shall equal (metered kilowatt hours times 1.01) times one mill.

(3) Where electric power and energy is delivered at a lower voltage than 69,000 volts, the compensation shall equal (metered kilowatt hours times 1.02) times one mill.

Compensation to be paid for Rushmore Wyoming's first 150,000 KW: The obligation of Rushmore to deliver electric power and Black Hills to furnish transmission service to Rushmore Wyoming is for all of Rushmore Wyoming's energy needs associated with the first 150,000 kilowatts of capacity needed by Rushmore Wyoming during the ultimate term. If, for any reason, during the term of this contract, Rushmore or Rushmore Wyoming should contract power and energy regardless of source over some other contractual transmission path without mutual agreement of the parties for a part of all of the first 150,000 kilowatts of capacity and associated energy required by Rushmore Wyoming, Basin Electric as compensation for the obligations of Black Hills undertaken in this contract, shall still be obligated to pay Black Hills the compensation as set forth herein as if all of Rushmore Wyoming's first 150,000 kilowatts of capacity and associated energy needs were being delivered under the provisions of this contract for the entire term.

Transmission Service Contract between Nebraska Public Power District and Basin Electric Executed April 29, 1977

A) Nature of Obligations and Benefits:

The District shall transmit through its Bulk Transmission System, power for Basin Electric in the amount of 500 MW from the east side unit of the Laramie River Station. Basin Electric will provide a contribution in aid of construction for this transmission of power.

B) List of all Parties to the Agreement:

Basin Electric, acting as Project Manager and Operating Agent for the Missouri Basin Power Project and on its own behalf, and as agent for the participants of the Project, namely Basin Electric Power Cooperative, Bismarck, North Dakota; City of Lincoln, Nebraska; Heartland Consumers Power District, Madison, South Dakota; Western Minnesota Municipal Power Agency, Ortonville, Minnesota; Tri-State Generation and Transmission Association, Inc., Denver, Colorado; and the Wyoming Municipal Power Agency, Lusk, Wyoming; (all six together herein referred to as "Participant"), have entered into this agreement with Nebraska Public Power District.

C) Time Period:

This contract was executed April 29, 1977 and shall continue in force until December 31, 2040.

D) Amount of Electrical Energy:

The District will receive power for Basin Electric in the amount of 500 MW. If the net capability of the east side unit is in excess of 500 MW, the District agrees to receive such net capability, but in no event shall the amount of power exceed 550 MW.

E) Specified Timing or Rate of Delivery or Receipt of Energy:

The District's obligation to transmit power shall commence September 1, 1980. The delivery of power by the District to the Points of Delivery shall be limited to the amount specified in the "Points of Delivery" indicated on page 34.

F) Financial Agreement:

In recognition of the long-term nature of this contract, Basin Electric has agreed to pay a contribution in aid of construction for bulk transmission service which is estimated at $51,591,700. This contribution shall be deemed a credit against the charges for the annual cost of the bulk transmission service.

Transmission Service Contract Between
Nebraska Public Power District and Basin Electric Power Cooperative

POINTS OF DELIVERY

One Point of Delivery shall be comprised of the points of interconnection between Nebraska Public Power District and Joint Transmission System for delivery of up to 300 MW*, less losses, to Heartland Consumers Power District, Basin Electric Power Cooperative, and Western Municipal Power Agency:

1. At Hinton, Iowa, where the district's 230 KV Hinton - Twin Church transmission line connects to the USBR Sioux City (Hinton) substation 230 KV bus.
2. At Belden, Nebraska, where the USBR 115 KV Gavins Point - Belden transmission line connects to the District's Belden substation 115 KV bus.
3. At Gavins Point Substation, South Dakota, where the District's 115 KV Gavins Point - Neligh transmission line connects to the USBR Gavins Point substation 115 KV bus.
4. At O'Neill, Nebraska, where the USBR 115 KV Ft. Randall - O'Neill transmission line connects to the District's O'Neill substation 115 KV bus.
5. At Mission, South Dakota, where the District's 115 KV Mission - Valentine transmission line connects to the USBR Mission substation 115 KV bus.
6. At Ft. Randall substation, South Dakota, where the District's 230 KV Ft. Randall - Columbus transmission line connects to the USBR Ft. Randall substation 230 KV bus.

*Subject to pro rata adjustment based on Article II.

Electric Service Agreement between Basin Electric and United Power Association dated January 10, 1968

A) Nature of Obligations and Benefits:

This agreement allows Basin Electric and UPA to derive additional benefits from the interconnection of their systems by the purchase, sale or interchange of various classes of power and energy. These include: Breakdown on Emergency Service, Start-up and Maintenance Energy Service, Interchange of Energy, General Purpose Energy, and Temporary Firm Power.

B) List of all the Parties to Agreement:

The Electric Service Agreement was executed between Basin Electric Power Cooperative and United Power Association.

C) Time Period:

The Agreement was executed January 10, 1968 and shall continue in effect until September 24, 1986.

D) Amount of Electrical Energy:

All deliveries of power and energy by either party are scheduled in advance, emergencies expected.

E) Specified Timing or Rate of Delivery or Receipt of the Energy:

Each class of power and energy is scheduled according to the needs of day-to-day operation.

F) Financial Agreements:

Each class of service scheduled shall be itemized and accounted for separately. Breakdown on Emergency Service shall be either:

(1) by mutual agreement, returned to the supplier kilowatt hour for kilowatt hour under substantially similar load conditions as when delivered, as scheduled pursuant to Paragraph 1.03, or

(2) paid for at the rate of four mills ($0.004) per kilowatt hour. Start-up maintenance energy service shall be delivered at the rate of four mills ($0.004) per kilowatt hour.

Interchange of energy delivered shall be returned kilowatt hour for kilowatt hour at existing points of interconnection at times and rates scheduled. For settlement purposes, interchange energy has a net value of three mills ($0.003) per kilowatt hour.

General purpose energy shall be at a rate of three mills ($0.003) per kilowatt hour.

Temporary firm power will be negotiated at the time of purchase.

Interconnection Agreement between Basin Electric and United Power Association dated September 24, 1966

A) Nature of Obligations and Benefits:

Basin Electric and UPA expect benefits through the interconnection of their respective systems by operating in a manner set forth in the agreement. UPA and Basin Electric provide their respective 230 KV substation facilities required to terminate their interconnecting facilities.

B) List of all Parties to the Agreement:

The Interconnection Agreement was executed between UPA and Basin Electric.

C) Time Period:

The agreement was executed September 24, 1966 and shall continue in effect for a period of 20 years.

D) Amount of Electrical Energy:

(1) The parties agree to normally operate their steam electric generating plants in the vicinity of Stanton, North Dakota, interconnected. As a result of such interconnected operation, there may be inadvertent flows of power and energy from the system of one party through the system of the other party.

E) Specified Timing or Rate of Delivery or Receipt of the Energy:

Each party agrees that during such periods of inadvertent flow, the input of electric power and energy into the other party's system shall at all times be approximately equal to the amount of electric power and energy withdrawn therefrom.

F) Financial Agreements:

Any unintentional delivery of power and energy by either party to the other shall be returned and balanced out as soon as practicable in accordance with procedures established by the Operating Committee.

Joint Transmission System and Mutual Services Contract between Basin Electric and the U.S. Bureau of Reclamation -- Western Area Power Administration (WAPA)

A) Nature of Obligations and Benefits:

This agreement provides the following:

(1) The establishment of a "Missouri Basin Systems Group Pooling Agreement". The MBSG makes engineering studies concerning the location, size, time of installation of thermal generating facilities for the purpose of coordinating such installations for the maximum benefit of all the participating systems. The MBSG also conducts annual operational studies to determine if the Joint Transmission System is adequate to carry the power requirements of the MBSG for the following three years.

(2) The establishment of a "Joint Transmission System" which is composed of certain high voltage transmission lines and associated substations. The JTS provides a transmission grid for members of the MBSG so they can receive power and energy generated at the hydroelectric generating plants of the USBR or by electric generating facilities in the area constructed and operated by other parties of the MBSG. At the present time, Basin Electric has the rights to deliver about 1,000,000 KW to our members over the JTS.

(3) Provides for the sale of peaking power to Basin Electric from the hydroelectric generating resource of the USBR.

(4) Provides for 179 MW operating reserves for Basin Electric's Leland Olds Units No. 1 and 2 from the hydroelectric generating resources of the USBR.

B) List of all parties to agreement:

The contract was executed between Basin Electric Power Cooperative and the U.S. Bureau of Reclamation.

C) Time Period:

The Agreement was executed November 29, 1962 and shall continue in effect until December 31, 2001. Supplements 1,2,4,5,6 and 7 are in effect until December 31, 2001.

D) Amount of Electrical Energy: Supplement No. 3

The USBR is obligated under Supplement 3 to provide 280 MW of firm peaking power for each winter season from 1978/79 until December 21, 1989.

E) Specified Timing or Rate of Delivery of the Energy:

All deliveries of peaking power during the winter season shall commence with the November billing period and terminate with the April billing period.

F) Basin Electric currently pays the WAPA approximately $15.99 per KW/year for capacity in the Joint Transmission System for power generated and delivered from Basin Electric's resources for Leland Olds #2 and other resources, and $8.48 per KW/year for capacity rights in the JTS for Leland Olds #1. Basin Electric is currently paying the USBR $8.10 per kw/season for the 280 MW of firm winter peaking power and must return the enrgy to the USBR at mutually agreeable times.

Interconnection and Transaction Agreement Respecting Boundary Dam - Logan 230 KV Interconnection between Basin Electric Power Cooperative and Saskatchewan Power Corporation dated April 13, 1978.

A) Nature of Obligations and Benefits:

This agreement provides for the construction of a 230 KV transmission line by Basin Electric from Minot, North Dakota (Logan Substation) to the Canadian border and from the Canadian border to Estevan, Saskatchewan (Boundary Dam Substation) by Saskatchewan Power Corporation. The benefit of this agreement is the exchange of peaking capacity on a seasonal basis between Basin Electric Power Cooperative and Saskatchewan Power Corporation.

B) List of all Parties to the Agreement:

The agreement was executed between Basin Electric Power Cooperative and Sasktachewan Power Corporation.

C) Time Period:

This contract commenced April 13, 1978 and terminates April 30, 2000.

D) Amount of Electrical Energy in Megawatts to be Exported and Imported:

Saskatchewan Power Corporation shall supply to Basin Electric 100 MW of capacity during each summer season commencing with the summer season of 1981 until the termination of the contract. Basin Electric shall supply to Saskatchewan Power Corporation, 100 MW of capacity during each winter season commencing with the 1986/87 winter until the termination of the contract.

E) Specified Timing or Rate of Delivery or Receipt of Energy:

The energy associated with the above 100 MW capacity exchange shall be limited to 20 percent monthly load factor. The summer season is defined as May 1 through October 31 of each year and the winter season is defined as November 1 through March 31 of the following year. Additional energy may be exchanged or sold between the utilities as required and as arrangements are worked out on a case-by-case basis.

F) Financial Agreements:

The intent of this agreement is an exchange agreement. Therefore there is no charge when the capacity and energy exchanged is equal. However when a difference occurs the Mid-Continent Area Power Pool (MAPP) floor rate applicable to the sale of peaking power is used to determine the charge for capacity and energy. Billing for other energy exchanged or sold is also determined according to the appropriate MAPP schedule.

VIII

Efforts To Minimize Environmental Impacts

In accordance with the provisions of the Montana Major Facility Siting Act, Basin Electric is following the prescribed procedures in the planning for potential future electric generating facilities and transmission systems in Montana.

In 1979 and early 1980, Basin Electric representatives conducted an information program in order to ensure that the appropriate state agencies and the general public of Montana were informed of the Cooperative's plans for potential coal-fired generating facilities that may be constructed in Montana in the early 1990s. This project is Basin Electric's Sunrise Project.

Representatives of Basin Electric met with those Montana state agencies (see list Page 34) potentially concerned with the siting of a major power facility and distributed copies of a study identifying 25 potential sites in the Midwest for future base-load generation for Basin Electric. Of the 25 potential sites, three were subsequently identified as preferred areas. The site under consideration in Montana is in the Circle area.

Public information meetings as part of the scoping process on the Sunrise Project were held during 1979 and 1980 to allow state agencies and the general public early involvement in the project. Public information meetings are required by regulations of the Council on Environmental Quality (CEQ).

Basin Electric has placed high priority on the region's social and physical environment.

All projects proposed by Basin Electric are accompanied by a detailed impact assessment. Compiled through an open planning process which includes local input, impact assessments identify all impacts which may have an effect on the physical and social environment. Once all potential impacts have been identified, mitigation strategies are developed with regulatory agencies and/or concerned citizen groups.

All of Basin Electric's facilities meet Federal and state air and water quality pollution control standards. Since 1977 the Cooperative has been involved in the development of a new dry desulfurization process for coal-fired power plant emissions.

Recognizing the advancement which the Cooperative has made in the area of dry scrubbing, the Environmental Industry Council and the President's Council on Environmental Quality in 1980 presented Basin Electric an Award of Excellence in Air Pollution Control for outstanding technological achievement and leadership in all areas of pollution abatement.

Sunrise Project Montana Contacts

Department of Fish and Game

Department of Health and Environmental Sciences

Department of State Lands

Environmental Quality Council

Department of Agriculture

Office of Commerce and Small Business Development

Department of Natural Resources and Conservation

Department of Highways

State Historical Society

Department of Community Affairs

Department of Public Service Regulation

Montana Trade Commission